

Applicant : Ullas Gargi
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Attorney's Docket No.: 200207387-1
Amendment dated March 11, 2009
Reply to Office action dated Dec. 18, 2008

Remarks

I. Status of claims

Claims 1-51 were pending.

Claims 24-26 have been canceled.

II. Duplicate claim warning

The Examiner has advised that he considers claims 7 and 9 to be substantial duplicates of each other under 37 CFR 1.75.

Contrary to the Examiner's statement, however, claims 7 and 9 are not "so close in content that they both cover the same thing." For example, claim 9 recites that "the processing comprises determining the weighted measures of cluster extent by applying to the measures of cluster extent respective weights that decrease with increasing sizes of the respective object clusters." Claim 7, on the other hand, does not recite anything about "applying to the measures of cluster extent respective weights that decrease with increasing sizes of the respective object clusters."

For at least this reason, the Examiner's duplicate claim warning should be withdrawn.

III. Claim rejections under 35 U.S.C. § 101

The Examiner has rejected claims 22, 32, and 51 under 35 U.S.C. § 101 as being directed to software per se. Each of claims 22, 32, and 51 has been amended to recite structural elements (e.g., a computer-readable medium and a data processing unit; see, e.g., page 6, line 14 - page 7, line 12, of the specification). For at least this reason, the rejection of independent claims 22, 32, and 51 under 35 U.S.C. § 101 now should be withdrawn.

IV. Claim rejections under 35 U.S.C. § 112, first paragraph

A. Introduction

The Examiner has rejected claims 1, 33, 36, and 51 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

In accordance with MPEP § 2163.II.A.3(b):

The examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims.

B. Claim 1

The Examiner has based his rejection of claim 1 under 35 U.S.C. § 112, first paragraph on the following assertion (page 4, first ¶ on the Office action; underlining added):

Regarding claim 1, the new claimed limitation *the measure of object density corresponding to a measure of distribution of distances separating adjacent ones of the objects in the current object cluster measured in the selected dimension of the context-related metadata as amended* was not described in the Specification.

In this regard, the Examiner merely has asserted that the “measure of object density” element of claim 1 “was not described in the Specification.” Such an assertion, by itself, does not constitute an explanation of “why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims.” At the very least, the Examiner is obligated to explain the reasons why the disclosure on page 11, line 2 - page 12, line 4, does not describe the subject matter defined in independent claim 1 in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this reason, the rejection of independent claim 1 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Moreover, contrary to the Examiner’s position, the subject matter of claim 1 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed. In particular, the specification discloses that “The object density of a cluster corresponds to a measure of the distribution of object intervals in the cluster” (page 11, lines 2-4), where “The interval between successive objects corresponds to the distance separating the objects measured in the dimension of the context-related meta data in accordance with which the object sequence is arranged” (page 9, lines 18-20). Thus, the subject matter of claim 1 is described in the specification in such a way as to reasonably

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convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this additional reason, the rejection of independent claim 1 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

C. Claim 33

The Examiner has based his rejection of claim 33 under 35 U.S.C. § 112, first paragraph on the following assertion (page 4, second ¶ on the Office action; underlining added):

Regarding claim 33, the new claimed limitation without graphically presenting representations of unselected ones of the constituent objects of the cluster as amended was not described in the Specification.

In this regard, the Examiner merely has asserted that the “without graphically presenting” element of claim 33 “was not described in the Specification.” Such an assertion, by itself, does not constitute an explanation of “why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims.” At the very least, the Examiner is obligated to explain the reasons why the disclosure on page 18, line 26 - page 19, line 7, and shown in FIG. 9, does not describe the subject matter defined in independent claim 33 in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this reason, the rejection of independent claim 33 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Moreover, contrary to the Examiner’s position, the subject matter of claim 33 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed. In particular, the specification describes an embodiment in which the layout engine 164 “selects for each object cluster at least two constituent objects representative of beginning and ending instances in the corresponding object sequence”, and the user interface 240 graphically presents the selected representative objects 242-248” (see page 18, line 26 - page 19, line 7). As shown in FIG. 9, the selected representative objects

242-248 are presented without graphically presenting representations of unselected ones of the constituent objects of the clusters. Thus, the subject matter of claim 33 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this additional reason, the rejection of independent claim 33 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

D. Claim 36

The Examiner has based his rejection of claim 36 under 35 U.S.C. § 112, first paragraph on the following assertion (page 4, third ¶ on the Office action; underlining added):

Regarding claim 36, the new claimed limitation presenting the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters as amended was not described in the Specification.

In this regard, the Examiner merely has asserted that the “presenting the selected representative objects” element of claim 36 “was not described in the Specification.” Such an assertion, by itself, does not constitute an explanation of “why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims.” At the very least, the Examiner is obligated to explain the reasons why the disclosure in claim 36 as originally filed (“wherein the representative objects of any given cluster are presented closer to each other than to the representative objects of other clusters”), page 19, lines 6-7, and shown in FIG. 9, does not describe the subject matter defined in independent claim 36 in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this reason, the rejection of independent claim 33 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Moreover, contrary to the Examiner’s position, the subject matter of claim 36 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed. In particular, the specification discloses that “The representative objects of any given cluster are presented closer to each other than to the representative

objects of other clusters" (page 19, lines 6-7; also see claim 36 as originally filed), and FIG. 9 shows that the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters. Thus, the subject matter of claim 36 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

For at least this additional reason, the rejection of independent claim 36 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

D. Claim 51

The Examiner has based his rejection of claim 51 under 35 U.S.C. § 112, first paragraph on the following assertion (page 4, fourth ¶ on the Office action; underlining added):

Regarding claim 51, the new claimed limitation without graphically presenting representations of unselected ones of the constituent objects of the cluster and presenting the selected representative objects with the spacing between adjacent ones of the selected representative objects in the same cluster smaller than the spacing between adjacent ones of the selected representative objects in different clusters as amended was not described in the Specification.

In this regard, the Examiner merely has asserted that the "without graphically presenting" and the "presenting the selected representative objects" element of claim 36 "was not described in the Specification." Such an assertion, by itself, does not constitute an explanation of "why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims." At the very least, the Examiner is obligated to explain the reasons why the disclosure in claim 36 as originally filed ("wherein the representative objects of any given cluster are presented closer to each other than to the representative objects of other clusters") page 18, line 26 - page 19, line 7, and shown in FIG. 9, page 19, lines 6-7, and shown in FIG. 9, does not describe the subject matter defined in independent claim 51 in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed.

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For at least this reason, the rejection of independent claim 33 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

Moreover, contrary to the Examiner's position, the subject matter of claim 36 is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application was filed. In particular, the specification discloses the "without graphically presenting" and the "presenting the selected representative objects" element of claim 36 for the same reasons explained above in connection with the rejection of claims 33 and 36 under 35 U.S.C. § 112, first paragraph.

For at least this additional reason, the rejection of independent claim 51 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

V. Claim rejections under 35 U.S.C. § 112, second paragraph

The Examiner has rejected claim 33 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner has stated that (page 5, lines 8-9, of the Office action):

Regarding claim 33, the clause *the constituent objects of the clusters* references to other items in the claim. It is unclear what item is being referenced.

The first clause of the body of claim 33 recites that each of the clusters includes "multiple constituent objects." The second clause of the body of claim 33 recites that for each cluster at least two constituent objects are selected. With this antecedent support, there is no ambiguity as to what "unselected ones of the constituent objects of the clusters."

For at least this reason, the rejection of independent claim 33 under 35 U.S.C. § 112, second paragraph, should be withdrawn.

VI. Claim rejections under 35 U.S.C. § 102

A. Introduction

The Examiner has rejected claims 1-19, 21-37, 39-49, and 51 under 35 U.S.C. § 102(b) over Graham ("Time as Essence for Photo Browsing Through Personal Digital Libraries").

The relevant part of 35 U.S.C. § 102(b) recites that “A person shall be entitled to an invention, unless - ... the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.” Anticipation under 35 U.S.C. § 102(b) requires that each and every element of the claimed invention be present, either expressly or inherently, in a single prior art reference. EMI Group N. Am., Inc., v. Cypress Semiconductor Corp., 268 F.3d 1342, 1350 (Fed. Cir. 2001). Anticipation must be proved by substantial evidence. In re Crish, 393 F.3d 1253, 73 USPQ2d 1364 (Fed. Cir. 2004).

B. Independent claim 1

Claim 1 has been amended and now recites:

1. A method of organizing a collection of objects arranged in a sequence ordered in accordance with a selected dimension of context-related metadata respectively associated with the objects, comprising operating a processor to perform operations comprising:

classifying the objects in the sequence to generate a series of object clusters, wherein the classifying comprises sequentially processing each of the objects as a respective candidate for segmentation into a respective current one of the object clusters in the series and, for each of the candidate objects,

determining a candidate object interval separating the candidate object from an adjacent object in the sequence already segmented into the current object cluster, the candidate object interval being measured in the selected dimension of the context-related metadata,

comparing the candidate object interval to a weighted measure of cluster extent for the current object cluster, the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata, and

comparing the candidate object interval to a weighted measure of object density for the current object cluster, the measure of object density corresponding to a measure of distribution of distances separating adjacent ones of the objects

in the current object cluster measured in the selected dimension of the context-related metadata.

The rejection of claim 1 under 35 U.S.C. § 102(b) over Graham should be withdrawn because Graham does not expressly nor inherently disclose each and every element of the claim.

For example, Graham does not expressly nor inherently disclose “comparing the candidate object interval to a weighted measure of cluster extent for the current object cluster, the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata,” as recited in claim 1.

The Examiner has taken the position that Graham discloses this element of claim 1 on page 4, col. 2, lines 3-28 (see page 6, bottom ¶ - page 7, first ¶ of the Office action). In pertinent part, the Examiner has stated that:

... The Graham's teaching as discussed indicates the step of *comparing the candidate object interval, e.g., time interval of two consecutive images, to a weighted measure of cluster extent for the current object cluster, e.g., a specified constant time difference, the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata, e.g., the 1 hour difference spanned by all images in the current cluster...*

Thus, the Examiner's rejection of claim 1 under 35 U.S.C. § 102(b) is premised on his assumption that the one hour time difference disclosed on page 4, col. 2, lines 3-28, constitutes “the measure of cluster extent corresponding to a current distance spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata,” recited in claim 1. Contrary to the Examiner's assumption, however the one hour time difference is the time difference that was “used during initial clustering” (see page 4, col. 2, lines 24-28 of Graham). This time difference is a “constant time difference” (page 4, col. 2, line 9) that represents “the time differences between the initial clusters” (page 4, col. 2, line 23; emphasis added). The one-hour fixed time difference between the initial clusters does not constitute a “measure of cluster extent corresponding to a current distance

spanned by all the objects in the current object cluster measured in the selected dimension of the context-related metadata," recited in claim 1.

For at least this reason, the rejection of independent claim 1 under 35 U.S.C. § 102(b) over Graham should be withdrawn.

B. Claims 2-19 and 21

Each of claims 2-19 and 21 incorporates the elements of independent claim 1 and therefore is patentable over Graham for at least the same reasons explained above.

C. Independent claim 22

Independent claim 22 recites elements that essentially track the pertinent elements of independent claim 1 discussed above. Therefore, independent claim 22 is patentable over Graham for at least the same reasons explained above in connection with independent claim 1.

D. Independent claim 23

Independent claim 23 has been amended and now recites:

Claim 23 (currently amended): A method of organizing a collection of objects, comprising operating a processor to perform operations comprising:

segmenting objects from the collection into clusters;

extracting context-related meta data corresponding to object generation locations associated with the objects and parsable into multiple levels of a name hierarchy; and

assigning names to clusters based on the extracted context-related meta data corresponding to a level of the name hierarchy selected to distinguish segmented clusters from one another.

The rejection of claim 23 under 35 U.S.C. § 102(b) over Graham should be withdrawn because Graham does not expressly nor inherently disclose each and every element of the claim.

For example, Graham does not expressly nor inherently disclose "extracting context-related meta data corresponding to object generation locations associated with the objects and

parsable into multiple levels of a name hierarchy.” The “corresponding to object generation locations” element of claim 23 originally was recited in dependent claim 26. In support of the rejection of claim 26, the Examiner has taken the position that Graham discloses the “corresponding to object generation locations” element of claim 23 on page 4, col. 2, lines 33-42 (see page 12, sixth ¶ of the Office action) Contrary to the Examiner’s assertion, however, page 4, col. 2, lines 33-42, only discloses the process of refining the initial clusters based on the rate at which photographs are taken. The description on page 4, col. 2, lines 33-42, relating to different locations merely illustrates examples of cases in which “the rate at which photographs are taken is likely to differ significantly between types of events.”

For at least this reason, the rejection of independent claim 23 under 35 U.S.C. § 102(b) over Graham should be withdrawn.

E. Claims 27-31

Each of claims 27-31 incorporates the elements of independent claim 23 and therefore is patentable over Graham for at least the same reasons explained above.

F. Independent claim 32

Independent claim 32 recites elements that essentially track the pertinent elements of independent claim 23 discussed above. Therefore, independent claim 32 is patentable over Graham for at least the same reasons explained above in connection with independent claim 1.

G. Independent claim 33

Independent claim 3 has been amended and now recites:

Claim 33 (currently amended): A method of organizing a collection of objects, comprising operating a processor to perform operations comprising:

accessing a sequence of objects segmented into clusters each including multiple constituent objects arranged in a respective sequence in accordance with context-related meta data associated with the objects;

selecting for each object cluster at least two constituent objects representative of beginning and ending instances in the corresponding object sequence; and

in a user interface, graphically presenting the selected representative objects of each cluster without graphically presenting representations of unselected ones of the constituent objects of the clusters.

The rejection of claim 33 under 35 U.S.C. § 102(b) over Graham should be withdrawn because Graham does not expressly nor inherently disclose each and every element of the claim.

For example, Graham does not expressly nor inherently disclose “selecting for each object cluster at least two constituent objects representative of beginning and ending instances in the corresponding object sequence.”

The Examiner has taken the position that Graham discloses this element of claim 33 on page 5, col. 2, lines 42-47 (see page 14, top ¶ of the Office action). Contrary to the Examiner's position, however, the cited paragraph of Graham only discloses how the screen space is allocated in proportion to the number of photos in each cluster.

For at least this reason, the rejection of claim 33 under 35 U.S.C. § 102(b) over Graham should be withdrawn.

H. Claims 33-37 and 39-49

Each of claims 33-37 and 39-49 incorporates the elements of independent claim 33 and therefore is patentable over Graham for at least the same reasons explained above.

I. Independent claim 51

Independent claim 51 recites elements that essentially track the pertinent elements of independent claim 33 discussed above. Therefore, independent claim 51 is patentable over Graham for at least the same reasons explained above in connection with independent claim 1.

VII. Claim rejections under 35 U.S.C. § 103

The Examiner has rejected claims 20, 38, and 50 under 35 U.S.C. §103(a) over Graham.

Claim 20 incorporates the elements of independent claim 1 and therefore is patentable over Graham for at least the same reasons explained above in connection with claim 1.

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Claim 38 incorporates the elements of independent claim 33 and therefore is patentable over Graham for at least the same reasons explained above in connection with claim 33.

Claim 50 incorporates the elements of independent claim 33 and therefore is patentable over Graham for at least the same reasons explained above in connection with claim 33.

VIII. Conclusion

For the reasons explained above, all of the pending claims are now in condition for allowance and should be allowed.

Charge any excess fees or apply any credits to Deposit Account No. 08-2025.

Respectfully submitted,

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